

BULBS FOR POTS

AND SPRING PLANTING IN THE GARDEN



A CATALOG OF THE BULBS AND PLANTS OF THE AMARYLLIS, IRIS,
ORCHID, GESNERIA AND OTHER PLANT FAMILIES
AND MANUAL OF THEIR CULTURE

AFRICAN VIOLETS

Many Reduced Prices. New Items Listed. Culture Directions.
A Personal Letter,—to You.

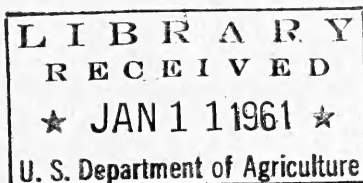
SPRING 1961



CECIL HOUDYSHELE

1412 Third St.

La Verne, Calif.



Return Postage Guaranteed.
If not interested, please
refuse delivery.

Bulk Rate

A Personal Letter—To You:

Dear Floral Friend,

It is easy to give advice. Sometimes it is hard to take. For that reason this letter is mostly made up of quotations. First, from the greatest man that ever lived, Jesus Christ.

“Suffer little children to come unto me for of such is the Kingdom of heaven.”
“Return good for evil.” “Love thine enemy.”

From the hymn, “Work for the night is coming when man’s work is done.”

From John Greenleaf Whittier, Evictus, “So live that when thy summons comes to join the inevitable throng thou go not like the quarry slave at night scourged to his dungeon, but soothed and sustained by an unfaltering faith, approach thy couch as one who lies down to pleasant dreams.”



Cecil Houdyshel

“How e’er it be, it seems to me

Tis only noble to be good

Kind hearts are more than coronets

And simple faith than Norman blood.”

Lord Tennyson, of England

Along with work we need relaxation. One needs a hobby and what could be more appropriate than growing flowers. My hobby is growing Camellias and I have a few promising seedlings.

Be sure to see our listing of Dutch Hybrid Amaryllis. We have some of the finest varieties and the largest bulbs we have ever had.

See our listing of Gladiolus and many other new items for your garden pleasure this spring. If you have not tried growing Gloriosa rothschildiana, you should.

Visitors are always welcome. From Los Angeles take San Bernardino Freeway to Ganesha turnoff (Los Angeles Fair) to the Fair Grounds, left to first street (E), right to Third Street, left to 1412 3rd St. From the east turn off freeway at Towne, right to La Verne Rd. (a short block), left to Lincoln, right to 3rd St., left to our place.

Write to Mrs. Houdyshel for information on lectures on African Violets and rare bulbs. Also has slides to rent.

Don’t miss the Pomona Valley African Violet Society’s Seventh Annual Show, April 17 and 18 in the Community Building just west of D Street on 3rd. Across from the Alpha Beta Food Market. Parking in rear. Tell your friends about the show.

Sincerely,

Cecil Houdyshel

TERMS AND INSTRUCTIONS FOR ORDERING

Prices in this catalog cancel all former prices. They are for one bulb unless otherwise stated. 12 bulbs are sold for price of 10 or 6 for price of 5. 100 bulbs for price of 70 unless noted. Books, garden supplies and plants take no quantity discounts. California customers must add 4% Sales Tax.

Remit in advance, in full, by check or M.O. No C.O.D. No charge accounts carried. Nothing reserved unless paid for in full. These terms reduce our expenses and lower the costs to you. 1, 2 or 3 cent stamps are accepted for small sums—under \$1.00.

Postage rates. With postage so high we find we must ask for postage. If you want to enclose the carriage charges with your order you may add 10% of the order with minimum of 50c, in which case there will be no additional charges for postage, nor will there be any refund. This applies unless otherwise stated. If wanted by airmail it must be at your expense. Or we will send Express collect for carriage.

Insurance up to \$10.00, 10c. \$10.00 to \$50.00, 20c. Postal insurance covers all except freezing in transit. Special Handling costs 25c up to 2 lbs.; 2 to 10 lbs., 35c. Special Delivery is better as it also speeds delivery and is handled more carefully. We are not responsible if plants are not immediately taken indoors. Up to 2 lbs. costs 45c. 2 to 10 lbs., 55c. Over 10 lbs., 70c. Each fee is for one package only.

Wholesale. There are several items we can supply wholesale. Send your want list and we will quote our best quantity prices. We can quote African Violets. Dealers only.

Partial Shipments are made if bulbs are not all dormant at same time. We deliver everything within the season for correct planting. We must collect from you the fees for Insurance, Special Handling, Special Delivery.

We guarantee our bulbs to be true to name and healthy and replace them if not.

Catalogs. Spring Catalog mailed Jan. 1; Fall Catalog, Aug. 15, or soon after.

General Culture Directions will be sent with all bulb or plant orders. Or we will mail you a copy for 10c.

GARDEN REFERENCE BOOKS

Bailey's *Cyclopedia of Horticulture*. This 3-vol. set of over 3,600 pages describes almost every cultivated plant and has a wealth of culture information. Price \$52.00.

Hortus Second (Bailey). A concise Dictionary of Gardening. This 778-page volume lists and describes nearly every plant offered in catalogs, and some that are not in the *Cyclopedia of Hort*. It contains a few culture hints. Price \$13.50.

Amaryllis and How to Grow Them, by Peggy Schulz. This book was written for amateurs and by a well known amateur. It contains much useful information. 128 pages, many line drawings, photographs and two colored plates. \$2.95.

Bulb Magic In Your Window. 100 bulbs to grow in your window, from *Achimenes* to *Zephyranthes*. 214 pages. 3 color plates and 42 full page illustrations. Complete growing instructions. \$3.95.

House Plants for Every Window, by Dorothy H. Jenkins and Helen Van Pelt Wilson. Formerly *Enjoy Your House Plants*. An up-to-the-minute revision of "the most popular book on house plants ever written." Covers many plants for the window garden. A must for The Window Gardener. \$3.50.

African Violets, Gloxinias, and their relatives. A guide to the cultivated Gesneriads by Harold E. Moore, Jr. 5 color plates and more than 40 line drawings, illustrating nearly every species described, have been expertly prepared by Marion Ruff Sheehan to help the grower identify his plants. Never before has this ornamental family been so completely and artistically depicted. \$10.00.

The New Greenhouse Gardening for Everyone, Ernest Chabot. Important factors are noted, including correct temperatures for forcing plants, bulbs, and orchids. \$4.75.

How to Grow Rare Greenhouse Plants. A new book on greenhouse gardening by Ernest Chabot. Complete directions for greenhouse culture of 260 rare plants. Everyone having a greenhouse should have both books. 182 pages. Illustrated. \$4.00.

Geraniums, Pelargoniums, by Helen Van Pelt Wilson. 248 pages, 7 color plates, many drawings and illustrations. Best book on this subject. \$4.50.

Gloxinias, and How to Grow Them, by Peggy Schulz. Illustrated by colored plates and line drawings. Many Gloxinia relatives discussed, 128 pages. \$3.50.

Growing Plants Under Artificial Lights, by Peggy Schulz. 146 pages. One color plate and many illustrations. \$3.50.

Tuberous Begonias, by Worth Brown. Mr. Brown is one of our most important hybridizers and wholesale growers. His book is a complete guide for the successful growing and propagation, outdoors or as house plants. 128 pages, illustrated. \$3.50.

The Complete Book of African Violets, by Helen Van Pelt Wilson. This is completely new and gives best information on hundreds of varieties. 29 Saintpaulias are shown in full color. 256 pages, fully illustrated. \$3.95.

How to Grow African Violets, by Carolyn Rector. 62 pages, paper-board covers. Illustrated. How to grow from seed, prepare potting soils, pollinate and hybridize, control pests, diseases, groom plants for show and grow from leaf cuttings. \$1.50.

The Little Bulbs, by Elizabeth Lawrence. Learn the charm of growing little bulbs. Miss Lawrence is a dedicated gardener. She won the Herbert Medal for her book "A Southern Garden" in 1943. \$4.00.

How to Grow Orchids, by Cecil Houdyshel. This booklet has recently been revised and is now 12 pages (formerly only 10 pages). Price 50c.

Amaryllis Manual, by Hamilton P. Traub. Dr. Traub, editor of Plant Life, has long been regarded as a world authority on the botany and cultivation of the Amaryllis. Culture, ornamental uses, and many forms of the species are treated in detail in this first complete and scientific work. Accompanying appendices provide the botanist with all the information he requires for a thorough knowledge of this important group of flowers. Illustrated. \$7.50.

Camellia Culture, edited by E. C. Tourje. A compendium of the latest scientific practices described from their own experience by 55 of the country's leading research workers and Camellia growers. The most comprehensive volume available on the culture of this favorite flowering shrub. Photographs and line drawings in abundance. 484 pages. \$11.50.

Garden Supplies

Postage Extra is necessary on several items below. The weight when packed is given on these items. It is clearly stated that you must send the postage when you order. Here is how to find it. We are very near Los Angeles. Call your P.O. and ask the cost of postage on the packed weight given from your P.O. to Los Angeles and send us that amount. Orchids that are shipped in pots or baskets are sent by express f.o.b. The minimum cost is \$2.36.

Spoonit is recommended for African Violets and all house plants or in the garden. Analysis: nitrogen, 18%; phosphoric acid, 20%; potash, 16%; chelated iron. To use, dissolve level tablespoonful in 1 gallon water or level teaspoonful in quart. Apply every 3 or 4 weeks. Transplants half strength. It never burns. **Prices:** 6 oz. package 60c plus 11c postage. 15 oz. pkg., \$1.25, plus postage on 1 lb. (See paragraph 1 above.) 2½ lb. pkg., \$2.50 plus postage on 3 lbs. Try the new **Orchid Spoonit**, 1 lb. \$1.25 plus postage on two lbs. Spoonit can now be furnished in a 5 lb. drum for \$4.50, f.o.b.

Blue Whale. 12 oz. liquid Blue Whale, \$1.00 postpaid. Sea Rich, Blue Whale Peat Moss, Bantam bag (approximately 10 lbs.) \$3.25 prepaid. We have Blue Whale liquids in several sizes as well as the Peat Moss, at the nursery. No. 2 Bag of Blue Whale \$1.00 postpaid. Dealers contact for wholesale prices.

We recommend the use of both Blue Whale peat and the Liquid Fertilizer. Our potting mix is made up with ½ Compost, ¼ Blue Whale peat, ¼ washed sand, and enough Sponge Rok to give it good drainage.

Write to Lue Hale, The Friendly Gardener, Acme Peat Products of Canada, 687 No. 7 Road, Dept. E, Richmond, B. C., for the African Violet Flyer and for the Foliar Feeding Suggestions.

Flower Pot Tree Stand, black, sturdy, with saucers to hold 13 pots. \$8.75. **Table Model**, holds six pots. \$5.00. Brass, \$6.50. Please add \$1.25 for mailing and promise to send any difference if not enough. Black stand to hold 18 pots, \$12.50. Brass, \$14.75. f.o.b. by express.

Plastic Pots. Green. 2½" starter pots 25c doz. \$2.00/100. 3", 50c doz. 100/\$4.00. New idea for pots. Square, with mesh bottom which will give very good drainage. 3" holds more soil than the above at 75c doz. \$5.00 per 100. 4" \$1.20 doz., \$9.00 per 100, plus postage.

Osmundine, best Florida grade, \$2.00 lb. postpaid.

N.P.I. A new planter mix. 150 cubic inches, 59c, postage for 2 lbs. 600 cubic inches, \$1.59, postage for 4 lbs. A Nutrilite product.

Sphagnum Moss. Best we can get. 70c per lb. gross weight. Postage extra, for 1 lb.

Plant Labels. The following are plastic labels, easily written upon with pencil. **Pot Labels**, length 4½", 35c doz. Length 3½", 30c doz. 100, \$1.00. Small labels for **African Violets**, 2" long, 20c doz. 75c for 100. **Orchid Labels**. Perforated on one end, but without wire or cord, 2½", 30c doz. **Aluminum Tree Labels**. Emboss name on label with sharp pencil or ball point pen. Two sheets of aluminum make this strong and permanent, with wire to tie on, 35c doz. Package of 50, \$1.00 prepaid.

Wire Baskets. Our wire baskets are electrically welded, galvanized, non-rusting. The best obtainable. They look better, last longer than painted, soldered baskets and cost but little more. Price, with hangers, 8", \$1.00 ea., \$11/doz. 10", \$1.25 ea., \$13.50/doz. 16", \$2.75 ea., \$25.00/doz., postpaid.

Snap On Pot Hangers, for hanging any size pot. Galvanized. 35c ea. Send 10c ea. for postage. \$4.00/doz.

Baffle Spray Fogger. For greenhouse, lathhouse or outside. Fits ½" pipe. Adjustable fog spray thrown 6 ft. increases humidity, lowers temperature. Price, \$2.10; \$2.20 by mail.

CATALOG ARRANGEMENT

is by Plant Families, according to their relationship.

In the following lists the **genus** (plu. genera) is mentioned first. After it, the **species** (plu. also species) or horticultural variety is named. The initial of the genus is used for the second and succeeding species. Thus *A.* will stand for *Amaryllis* or *Agapanthus* depending on the genus last named in full.

THE AMARYLLIS FAMILY — Amaryllidaceae

This Family includes the following bulbs, *Agapanthus* thru *Zephyranthes*.

Agapanthus, Blue Lily of the Nile. They flower here in June to Aug. In the north they must be grown in large pots or tubs and wintered in a frost free room. Plant in full sun exposure in any good sandy garden soil that drains well.

Agapanthus longispatus. Similar to well known *A. orientalis*, but smaller and earlier to flower. Profuse bloomer. For pot growing. 50c, 3 for \$1.25.

A. orientalis. Dark blue. Larger than longispatus. Superior clone. \$1.00.

A. orientalis. Sky Blue. 75c.

A. von Wellighi hybrids. Selected clone. A giant type, very large, round umbel of blue flowers on a tall stem. Late flowering, extending the season. \$2.50.

Amarcrinum Howardi. Bigeneric hybrid of *Brunsvigia rosea* and *Crinum moorei*. Beautiful, fragrant, pure pink fls. Fall bloomer. Culture like *Crinums*. Hardy to So. Indiana. Large bulbs, \$2.50. Sm. \$1.25.

A. Dorothy Hannibal, a *Les Hannibal* origination. A new introduction. Like *Crinum*, Cecil Houdyshel it flowers in all seasons. The flowers are a very pretty pink. New low-price, \$4.00.

Amaryllis are the easiest, the most showy and popular of all bulbs for growing in pots. Equally desirable for southern gardens where they are hardy along the east coast.

to N. Car. and on the west to Vancouver. In the middle section they may be grown as far north as Ark. and Okla., but note special directions for colder sections.

How to Grow Amaryllis. In the garden, in the deep south where temperatures go only a few degrees under freezing, Amaryllis bulbs need to be covered only about an inch or two. Farther north they may be planted deeper in protected places and mulched with straw, leaves and/or brush. In Okla., a customer reports a depth of 4" with mulch is safe. Try our "Hardy Hybrids." Amaryllis must not be planted close to trees, shrubs or large vigorous plants, whose roots compete and take the moisture. Irrigate frequently. Rain is seldom enough. The most common error is lack of sufficient moisture. They are endemic to the tropics and in many cases, where there is almost daily rain. The soil should contain much humus. Add well rotted manure and if not slightly acid, add some peat but do not acidify the soil with sulphur or aluminum sulphate. We do not advise planting imported, greenhouse grown bulbs in the outside garden. They seldom do well outside.

In Pots. A 2½" bulb requires a 6" pot. Give a 3" to 3½" bulb a 7" pot. Remove dead roots but every vestige of living root should be left on. Our best success in flowering Amaryllis and in growing them on to larger, better bulbs is in a soil mixture composed of clean, sharp sand one part by volume and a mixture of pure organic material two or three parts. The latter may be pure peat or about half peat and half well broken up or decayed leaf mould, woods earth or completely reduced compost. The final mixture should have enough sand to feel very gritty. Such a mixture drains quickly but retains enough moisture around the roots.

To this mixture we add a tablespoon of bone meal and a level teaspoon of blood meal for each 6" pot. This is enough fertilizer until after bulbs have flowered.

The neck and about ½ of bulb should be above soil surface. This surface should be ½" below pot rim. In potting carefully spread out all living roots as they are a great advantage to bulbs. Such bulbs will start more quickly and may be given a warm temperature at once. If there are few or no living roots on bulbs, set them first in a cool place, about 50°, for roots to form and growth start.

We water at once and again when growth has started. With mixture above advised, one is not likely to over water tho you should be a little careful at first, if the bulb had no living roots. For as long as they will grow, potted Amaryllis need frequent watering. They are not only heavy drinkers but gross feeders. If you give liquid manure or Spoonit every 3 weeks, it will be about right. It is also good to vary the diet. Try Blue Whale.

Amaryllis like the sun. If the foliage fades the sun may be too strong or you may not be watering enough. In the house, give them a sunny window. Keep the bulbs growing vigorously until fall, Oct. or Nov. When outer leaves begin to go down, buds have been formed for next season's flowers and bulbs may be dried off and stored in a cool place. Inspect frequently. For early flowers, dry off about Nov. 1, or earlier.

A. bifida. Formerly known as *A. advena*. **Ox-blood Lily.** This is a fall bloomer. Hardy to So. Ind., Ill., Mo., Kansas, etc. There are 5 to 8 dark red fls. in an umbel. Not suitable for pots. Fall special, 35c ea. 3/\$1.00; \$3.50/doz. Smaller blooming size, \$12.50/100. Delivery about June.

Amaryllis Hybrids. The H & S strain is considered to be the best American strain. Assorted Colors. 90c ea. 3/\$2.50. 6/\$4.75. 12/\$9.50.

Dutch hybrid Amaryllis. We have the very best of the Van Meeuwen's Superiора named varieties for you this spring. The bulbs are large, give 3 stems as a rule, nearly all varieties bear 4 flowers on each stem. The wide flowers are flat. These lovely flowers smile at you in their full brightness while you look in their hearts. These are prepared Amaryllis to assure you early flowers.

Albino. Pure white, a little green in the throat, large flat flowers. Very free flowering. This variety will please everybody who loves white Amaryllis.

Faust. Shiny Dutch vermilion, a little darker in the throat. Very large flat flowers, 3 to 5 flowers per stem. A perfect variety.

Friendship. Salmon with a slight orange glow. Bears 4 to 5 flowers per stem. This

variety was named in the presence of His Excellency Minister Algera at the same time and place as the sensational new Dutch aeroplane "F 27" Friendship.

Giant Goliath. Deep vermilion, enormous flat faced and star shaped flowers, mostly 3 flower stems bearing 4 flowers each. This variety has an amazing ability to reflect light, resulting in a glossy bright sheen. Like Hollywood's term "Super-colossal." This variety caused a traffic mass at the Keukenhof Exhibition, 1958.

King Gustav VI Adolf. Bright red. This excellent Amaryllis produces very tall strong stems bearing always 4 enormous flat faced flowers per stem. Needless to say this variety is strongly recommended. It was named in the presence of His Majesty the King of Sweden.

Queen Superior. Excellent dark red. Large flat flowers, very free flowering, growing more beautiful each year. No Amaryllis collection is complete without this lovely variety. One of the best.

Queen of the Pinks. Beautiful soft Camellia pink, very free flowering. Produces 2 to 3 stems bearing 4 perfectly shaped flowers each. This variety is without any doubt one of the best pink varieties available at the present time.

Prices \$7.50 each. All seven, value \$52.50, for \$47.25. Prepaid.

D. & R. Dutch Hybrid Amaryllis. 3½" up. **Dark Red, White, Pink, Salmon and Orange.** Order by color please. These are fine hybrids. Price \$4.25 each. 6 colors value \$25.50 for \$22.95.

Seedlings of Dutch Amaryllis. We have made some crosses and all bulbs are of high quality and equal to imported bulbs. Not all are flowering sizes but most should flower.

Pink Favorite seedlings, Queen of the Whites or Van Tubergen Pinks. Small bulbs, \$4.00. One of each for \$10.00.

Queen's Page, Queen's Page x Alcgone, Sweet 17, Violetta, or Striped Superiora, \$2.50 each. One each of the five for \$10.50.

Special Price. One each of the 8 varieties of seedlings for \$19.00.

A. gracilis. Species. Miniature form. They bloom every year and are much admired due to their small size and perfect shape. \$7.50.

A. Lady Grant. Species. This was brought to California from India in late '20s. Broad leaf, white rib through center of leaf. Pink fls. Only a very few of these. Bulb rather small, may not flower first year. \$10.00.

Clivias have evergreen, strap-like foliage somewhat resembling that of Amaryllis. The orange flowers are produced in umbels of 10 to 25 in March and April.

Culture. They are usually grown in pots, even in the south, as more perfect foliage is thus possible, and when in flower one wants them in the house. We grow them in a lath house, lath spaced ½" apart, and in garden under Avocado (evergreen) trees, directly in the soil as they are often grown in Calif. When grown thus they will make very large clumps. They must have shade with only a few flecks of sunshine, but plenty of light and air.

Clivias must never be dried off or allowed to lose their foliage. Keep them well watered after flowering, all summer and fall. Liquid fertilizer occasionally helps. When growth ceases in late fall rest them by giving them less water. But keep moist enough to prevent wilting of foliage. At this time they should have a cool room with temperatures from above 32° to not much over 50°. Pots should be 6" to 8" for small plants and up to 12" for larger. As they grow and increase, do not divide but shift to larger pots. Drainage must be perfect. Potting soil as described under "General Culture Directions." pH 7 is about right. One cannot guarantee a Clivia to flower the first year after moving tho they usually do.

The foliage of our Clivias, grown outside in the ground will not be as perfect as that of pot grown plants. But when potted, they replace the old foliage in a few months and become specimen plants.

Clivia miniata. Wide open soft yellow orange fls. \$1.00, \$2.00 and \$2.75. Only the \$2.75 is likely to flower.

C. cyrtanthiflora. The flowers are tubular and long, yet they are so numerous that

they fill a large umbel and make a beautiful floral display. They are distinctly different from other *Clivias* also in their time of flowering. There is not a month in the year when we do not sometimes have flowers. Price \$10.00.

C. European Hybrids. The large flowers have well rounded petals of red-orange and the wide leaves are ornamental. This is the most desirable of all *Clivias*. Selected fine large plants, blooming size, \$6.50.

Crinums. Most *Crinums* are large bulbs and plants tho a few are no larger than an *Amaryllis*.

They are very popular in the south and are a common sight in southern gardens. Among trees and shrubs they are indispensable.

Culture. *C. bulbispermum* is hardy in the north, but there it should be planted 6" or more deep and mulched in winter. *Crinums moorei*, *Cecil Houdyshel* and *Powellii* *Alba* are equally hardy.

The ideal situation is among trees and shrubs, in a sandy soil but all except *moorei* can be grown in full sun exposure and in heavier soils. There should always be much leaf mould and peat incorporated in the soil—especially if heavy. The alkaline California soils need the addition of peat for growing *Crinums*. If your *Crinum* foliage becomes blotched with lighter green, as in the case where plants are infected with mosaic disease, the addition of much peat to the soil will lower the pH and probably cure the plants.

Crinums succeed in large pots or tubs but most of them require too much space for house or greenhouse growing. Tubs can be stored over winter and set outside in summer. In the south the bulbs may be planted very shallow. Keep always wet when growing.

C. bulbispermum. We have sold this as "capense," then as "longifolia" but botanists give priority to the present listed name because first given. We have *alba* and *rosea*, 50c. Good blooming size, \$1.00.

C. Cecil Houdyshel. Flowers deep rose pink. One of the best hybrids, all qualities considered. It has the same parents as *C. Powellii*. Instead of flowering only once, like *Powellii*, this hybrid has been known to give 12 or more flower scapes in one year. A large clump will give continuous bloom from spring to fall. It is hardy as far north as Independence, Mo. If planted 8" deep (to bottom of bulb) and heavily mulched over winter it has survived 10° below zero.

Prices reduced. Blooming size, \$1.50. Large, \$2.00. Jumbo bulbs, \$3.00 and \$4.00 each. They increase very rapidly and a jumbo size soon makes a large clump.

C. Ellen Bousanquet. Large, glowing, dark wine red flowers. A very beautiful *crinum*. \$1.00 and \$1.50.

C. Elizabeth Traub. Origination of Dr. Traub. It was obtained by crossing *C. scabrum* and *C. Ellen Bousanquet*. The flower color differs a little from the latter and the plant is much more sturdy. It makes offsets more freely. The culture is much easier. Those interested in *Crinum* breeding should try crossing this on *C. Cecil Houdyshel*. The latter makes a few seed and it can be done. \$3.50. Small \$2.00.

C. Erubescens. Milk and Wine Lily. Red purple center stripe on petals. 75c to \$1.50.

C. Gordon Wayne. The first third generation hybrid *Crinum* ever raised. Flowers large pure white, in late summer. \$1.50.

C. H. J. Elwes. Pink, very beautiful. Does not make large bulbs. Small plant more suitable for pots. Tender. Med. \$3.50.

C. kirkii. One of the most desirable of "Milk and Wine" type. White flowers with red center stripe. The large umbels have many flowers open at one time. \$1.25.

C. latifolium. This species is usually known in horticulture as *C. yemense*. The pure white flowers are very large and attractive and fittingly adorn an unusually attractive plant in June to July. \$3.00.

C. Louis Bousanquet. Very free flowering thru an unusually long season. Pink flowers on a very tall, erect scape. \$1.50.

C. Moorei. Large pink, bell-shaped flowers in the fall, freely produced. The long neck of the bulb surmounted by rotated leaves gives the plant great decorative value. Requires shade. Nearly as hardy as *bulbispermum*. \$1.00 and \$1.50.

C. Peach Blow. Exquisite large pink flowers. Free flowering from largest bulbs. A valuable hybrid. \$6.50. Probably tender.

C. Powellii alba. Extra fine pure white. One of the most valuable and beautiful Crinums. Small 50c. Good blooming size \$1.00. Largest, \$1.50.

C. Virginia Lee. Hybrid of two hybrids, Cecil Houdyshel x J. C. Harvey. The flowers are large, pink with a white throat. They become dormant in mid-summer and grow vigorously in cool weather. Price \$1.50.

Elisena longipetla. Very rare and lovely Peruvian amaryllid. It is related to the Ismene but the pure white flowers are far more delicate and graceful. Culture like Ismene. It can be forced in pots or grown in the garden in summer. Bulbs stored over winter like Glads. It is hardy in the middle south. It may be crossed with Ismene. \$1.50.

Eucharis. One of the finest genera of the Amaryllis Family. Large, pure white flowers of heavy texture and substance and resembling a very large white Daffodil. Very fragrant and highly prized as cut flower. Strictly glasshouse plants, requiring high night temperature. Plant in light mixture rich in humus, allow to become crowded in the pot. Provide good drainage. It may be flowered several times a year by alternate resting and growing periods.

Eucharis amazonica (or *Grandiflora*). Eucharist Lily. Star of Bethlehem. First collected on Banks of Rio Magdalena, Colombia, S.A. Thus are combined three Biblical names in the lore of this flower. There are 4 pure white, very fragrant flowers in an umbel with a cup in center. The beautiful evergreen foliage makes this always a decorative plant. \$1.50.

E. boucheii. A new importation. Very similar to the above except that the flower is smaller, ruffled, and yellow inside the trumpet. The foliage is brighter green, wider and more ribbed. A very attractive form well worth trying out. Delivery anytime. \$3.00.

Habranthus bloom several times a year and at most any time. Culture like Amaryllis. After good growth, if allowed to get rather dry for a period they will usually flower after a good watering. **H. robustus**, pink lavender, 50c ea. \$5.00 doz.

Haemanthus. The Blood Lilies of South Africa. So rare that few have seen them.

Culture. Hardy only in almost frost free climate like So. Calif. or Fla., if temperatures do not go below 24° at night. They do well in pots anywhere. The soil should be as for Amaryllis. They should have about half sun exposure. Pot with bulb only lightly covered.

Haemanthus produces red fruits containing seed. The flowers require hand pollination which may be done by rubbing palm of hand over the flower umbel when pollen is ripe. This spreads it to the pistils. Do this frequently as flowers do not all open at one time. Thus many valuable seed may be produced. Do not gather until quite red. When ready to plant, remove outer pulp and plant by pressing seed down slightly into soil but do not cover. One may plant in large clay pans and covered by pane of glass. Thus no watering may be needed until most of the seed are started. Growth begins by emergence of a radicle which will penetrate the soil. If soil is not loose, it may need help. A small bulb will form on tip of radicle and will later send up a leaf. Species are easily crossed to produce hybrids if anthers of mother plant are removed before ripening of pollen. Store pollen in advance in small stoppered glass phials, in refrigerator at 45°.

Haemanthus albiflos var. *brachyphyllus*. Short broad leaves, ciliated on edges. Small white flower in an umbel in fall. Evergreen. Plant just deep enough to hold bulb up. We have only a very few of this rare bulb at \$5.50.

H. coccineus. The true Blood Lily, altho all *Haemanthus* are known as Blood Lilies. The umbel of scarlet or blood-red flowers comes in late Aug. to Sept., after a 3 months dormancy. Two long semi-erect leaves follow the flowers and remain green thru the winter and early spring. The scape is attractively marked by red spots on a bright background. Flowering sizes, \$2.00 and \$3.00. Extra large, that should give two scapes, \$4.00.

Order now and we can deliver about June or July.

H. Katherinae has been called the most beautiful of flowering bulbs, in both foliage and flowers. The umbel of bright red flowers is often 10" in diam., often there are 125

or more flowers. The broad leaves spread from the top of a 10" stem making this a very attractive plant, for a 7" to 9" pot. Flowers usually in June or as late as Sept. In Jan. or later the green top bends over, the neck splits and a new growth emerges. Price \$5.00.

H. Natalensis. A very rare bulb. They may be flowered in house or greenhouse or outside garden if weather is warm. Flowers from January to March depending on when started in to growth. We have only a very few of these bulbs at \$7.00 ea.

H. multiflorus. In general appearance, it resembles *Katherinae*. Stem heavily spotted brown. This species is ideal for pots as it is more tropical and more tender. Blooms earlier. Flowers are described by botanists as blood-red but you may disagree. Blooming size, \$5.00.

We ship *H. Katherinae* and *H. multiflorus* as soon as safe to mail.

Hemerocallis. Daylily. The flowers range in color from dark bronzy red, thru pastel tones of pink to orange and yellow. They are borne on a branching scape well above the foliage. You may order from Spring, 1960, catalog.

We will send our selection of 10 named varieties for \$7.50. 34 varieties listed in spring 1960 value \$27.50. \$24.75. Local Nurserymen contact for prices on clumps.

Ismene. Their large, very fragrant, white flowers are very desirable for cutting and are seen often in florists' shops. The flowers are about the size of daffodils and because there is a cup in the center, they are often called "Peruvian Daffodils."

Culture. They are hardy only in the south. With deep planting they may be grown as far north as the Carolinas, where they should be covered by 5" of soil and well mulched in winter. Probably safe to leave in the ground in Oklahoma. In the north, plant in the garden in early spring and after frost cuts down the tops, dig and dry the bulbs well, then store at a temperature over 55°. If too cold in storage the bulbs will not flower and they may rot. Even in the south they must be covered by 4" of soil. *Ismenes* can also be grown in pots. See also their close relative, *Elisena*.

Ismene calathina. Type variety. 35c. Special price, \$2.00/doz.

I. festalis. An *Ismene-Elisena* hybrid. Pure white, no green markings. Long, narrow petals give great refinement and beauty to the flowers. No white *Amaryllid* is more elegant. The true variety, \$2.75.

I. macleana. A very tiny *Ismene* on long stems. Probably the hardiest. 75c.

I. Olympia. The giant among *Ismenes* and it is magnificent. The huge flowers are tinted yellow when first opened. Bulbs become very large and propagation is slow, hence they are expensive. Price, \$2.50, for blooming size.

I. Advance. Improved form of *Calathina*. \$1.00.

Ismene Collection. One bulb of each, 5 varieties, \$6.85.

Lycoris. Oriental Spider Lilies are natives of Japan and China. The entrancing beauty of their flowers makes them the most popular of garden bulbs in the south and very desirable pot bulbs in the colder sections. The most tender is *L. aurea*. It is hardy only in the deep south. All the others are hardy up to Va., Ky., Okla., etc. They prefer sandy fertile soil with peat or leaf mould added, plentiful watering from mid-July.

Lycoris albiflora. Large white fls. with color markings. Almost hardy. 75c.

L. aurea. Golden Spider Lily. One of the most beautiful of all bulbs. Not hardy except in deep south. 65c. 6, \$3.75. 12, \$7.25.

L. radiata. Red Spider Lily. Hardest of these listed above. Hardy to So. Kans. Deep coral red. 25c. 5/\$1. \$2.35 per doz.

L. squamigera, Amaryllis Halli or Magic Lily. Fine umbels of lilac-lavender flowers in August or later if planted later. Hardy in the north. Price 50c each. All the *Lycoris* delivered June-July.

Nerine. This genus includes some of the most beautiful of flowering bulbs. They bloom in succession from about Aug. to Jan. Hardy only where temperatures seldom go lower than 26°, but they are fine pot bulbs. **Culture.** Pot or plant in acid, sandy soil. Add peat or leaf mould. Pot at once with bulb covered and a little deeper in garden, in full sun. When foliage yellows, withhold water. Keep as near dry as possible when dormant. There is only one reason why you do not all buy *Nerines*. You do not know their beauty and ease of culture.

N. Bowdenii, var. Pink Beauty. Has larger, finer flowers and flowers much later,

usually in late Dec. or early Jan. Multiplies rapidly yet we can seldom have enough stock to list. \$2.00 each.

N. Bowdenii, var. Magnifice, very fine improved Bowdenii, similar to Pink Beauty but flowers earlier. Extra special price, \$1.00 ea.

N. rosea-crispa. Hybrid of Filifolia but larger in all parts. Can be kept evergreen or dried off in summer. 35c ea. \$3.00 doz.

Pancratium maritimum. Very fragrant white flowers, in shape like an Ismene but pure snow white. Culture. Simple. Plant them 4" deep and watch them grow. Hardy in middle south. 50c ea. 3/\$1.25.

Sprekelia formosissima superba. Orchid amaryllis. Deep crimson flowers in orchid-like form. Much larger than common type, better color, more flowers. Evergreen. Fine in pots. Culture like Amaryllis. 50c ea. 3/\$1.25. \$4.50 per doz.

S. formosissima, type variety. Similar color but slightly variable. 35c ea. \$3.50 doz.

Tulbaghia violaceae. Mauve flowers produced thruout the year, a true ever-bloomer. Foliage has garlic odor if bruised. An acquisition for pot culture. 25c ea. \$2.00 per doz.

T. cepaceae. Superior clone buds are a deeper color than violaceae and flowers more freely. 35c ea. \$3.00 doz.

T. fragrans. This species has a large, true bulb, with glaucous green foliage, 18" long and 1" wide. It has no allium odor. The plant is a profuse winter bloomer in a cool room with a few flowers in summer. It has larger fragrant flowers than violaceae, in the same color. Evergreen. Special price. \$1.00, 3 for \$2.50.

Vallota purpurea. Scarborough Lily. Large funnel shaped, scarlet flowers in late fall. Slightly difficult for inexperienced gardeners but very desirable. Grow in pots same soil as for Amaryllis with bone meal added, and top of bulb covered by 1" of compost. We can't guarantee our bulbs to flower this fall or at any time. Suggest you feed them with Spoonit or Blue Whale fertilizer. They are evergreen and must not completely dry off in winter. House or greenhouse culture is advised. They are a challenge to your gardening ability. They like to be crowded in pot. Price \$6.50.

Zephyranthes. Fairy lilies. The smallest Amaryllid, 6"-12" tall. Fine in beds or borders. Hardy in middle south. In north, dig and store. They may be grown in pots. Give acid soil, sandy loam with leaf mould or peat. Full sun or slight shade.

Z. candida. Pure white, evergreen. The masses of white flowers in late summer make them outstanding in a bed or edging for border. Half hardy and easy in pots. 2 for 25c. \$1.00 per doz. 100, \$5.00.

Z. grandiflora. The largest Zephyranthes and the best pink. It is very easy to grow. In the south, its habit of flowering every time it rains in summer gives it the name of Pink Rain Lily. 3/45c, 12, \$1.75.

Z. sulphurea. Deep yellow. 20c ea. \$2.00 doz.

The Alliace, or Onions, are now classed in Amaryllidaceae. The following are ornamental and useful for seasoning salads, soups or meats.

Allium schoenoprasum. True Chives. Grow in pot on window sill or garden in mild climates. Small clump 15c. 3 for 40c.

A. ostromskianum. Deep carmine rose. Dwarf. 15c ea. \$1.25 doz.

A. tuberosum. Japanese Garlic. Deliciously flavored leaves. Evergreen and probably not hardy in north. Sm. 2 for 25c. Large 25c ea.

IRIS FAMILY—Iridaceae

The Iris is the type genus of this family. Bearded Iris and Gladiolus are the outstanding members. Maricas are lovely and curious house plants, truly "out of the ordinary."

Tall Bearded Iris. No garden is complete without Bearded Iris. When in flower call at our gardens and pick out colors you want. **Special Offer**. If you do not care for names, we offer surplus rhizomes, 20 to 30 var., no labels, 100 for \$8.00, f.o.b. express. If by mail, send postage for 12 lbs. **Collection** of 10 fine varieties, labelled, our selection, \$2.50. 20 varieties, labelled, \$4.50.

I. unguicularis. Hardy only as far north as Washington, D.C. Bluish lilac fls. in winter. Needs partial shade. Water frequently when first planted. 50c.

I. Douglasiana, var. Watsoniana. Blue. Calif. native. Hardy in north. 75c.

Iris reticulata. This, smallest of bulbous Iris, is most useful for potting. Fragrant, violet blue flowers in January to February. Four bulbs in a 5" pot. Give a sunny window in a cool room. Hardy in south and in north if well protected. 25c ea. or 4 for 80c.

I. sandfordiae. Species. Golden yellow, very early. We still have a few but they must be ordered early if wanted. 15c ea. \$1.50 doz.

GLADIOLUS

The Gladiolus listed below will be ready in November. See last spring catalog for cultural directions and our new spring catalog out January 1, 1961, for larger list of varieties.

New All American Glads. Every garden should have these new Glads as well as the older varieties. Three new 1961 introductions.

China Blue. 1961. Soft blue, deeper at tips, lighter in throat.

Gypsy Dancer. 1961. Vivid fiery Orange with yellow on lower petals.

Landmark. 1960. Huge ruffled cream.

Little Pansy. 1960. Miniature violet with pansy face.

Rusty. 1961. Giant Smoky. Bright red mark on lip, silver picotee.

Prices. 35c ea., 3 for \$1.00, 12 bulbs for \$3.45.

K and M Butterfly Gladiolus. New. Small dainty ruffled flowers. Very popular for picking for the house.

Elf. Apricot, scarlet throat on yellow blotch, frilled.

Melodie. Salmon pink with orange scarlet blotches.

Rendezvous. Clear orange scarlet.

Summer Fairy. Reddish salmon, reddish maroon throat.

Topolino. Golden yellow, scarlet throat.

Walt Disney. Primrose with large scarlet blotch.

Prices. 2 for 30c, 6 for 80c, 12 for \$1.50.

Miniature Gladiolus. Like a miniature carving, a cameo or fine lace, they are dainty, beautiful and alluring. Fine for cut flowers. All are good blooming size bulbs. **Assorted Colors,** \$1.00 doz.

Betty Duncan. Late. Very nice deep orange. 10c ea. 75c doz. 100/\$6.00.

Capeheart. Early salmon rose pink. 6c ea. 60c doz.

Edgewood. Ruffled medium rose. 8 open on a tall spike. 10c ea. \$1.00 doz.

Elizabeth The Queen. Ruffled lavender. One of the most beautiful. 10c ea. 90c/12.

Friendship. Early. A lovely, ruffled soft pink with a cream throat. 10c ea. 75c doz.

Gold. Rich golden yellow. One of the best. 10c ea. \$1.00 doz. \$7.00/100.

Greenlight. The pale green of this flower with darker green of buds make a striking Glad. 15c ea. \$1.50 per doz. 100, \$9.75.

H. B. Pitts. Very fine large orange pink. 7c ea. 70c doz.

King David. Deep purple, velvety red throat, light Picotee edge. Heavily ruffled. 8 to 10 open. The finest of this color. 10c ea. \$1.00 doz. 100/\$7.00.

Prof. Gourdriaan. A very good white. 10c ea. \$1.00 doz. 100, \$7.00.

Red Charm. Pure med. dark red. Opens 8 to 9 at one time. 7c ea. 70c doz. 100, \$6.00.

Violet Charm. Light violet with a broad deep violet arrow on a cream throat. 10 open on 22 bud spike. A truly super quality glad in all respects. 10c ea. \$1.00 doz. 100/\$7.00.

Assorted Varieties. Good flowering size, 60c doz. 100/\$5.00.

Neomarica or Walking Iris are tropical and are favorite house plants for their unusual habit of growth.

Neomarica gracilis. Smallest and earliest. Use 5" pot. 75c.

N. Northiana. Larger plant and flowers, slow propagator. Use 6" pot. \$1.75.

N. hybrids. We crossed the above species and raised plants with flowers as large as **Northiana**, as profuse as **gracilis** and plants midway in size. They are rapid multipliers. \$1.75. All 3 kinds for \$3.75.

LILY FAMILY — Liliaceae

The type species is *Lilium*, or true Lily. Many call *Crinum*s, *Callas*, *Cannas*, or any bulbs "Lilies," but this is an error.

Lilium auratum platyphyllum. Gold Band Lily. \$1.25. **L. Golden Clarion.** \$1.10. **L. Red Champion.** 75c ea. We have a few of these, you may have one of each for \$2.50.

Gloriosa. Climbing Lily. The flowers resemble true lilies but surpass most of them in their gorgeous beauty and high coloring. They propagate by tubers instead of bulbs. The stem is branching and heavy and must be supported. Small tubers flower but the larger ones will give 2 or 3 times as many. They also make larger, more showy plants.

Culture. They must have the good drainage of very sandy soil, to which it is advisable to add peat liberally. Leaf mould will do, but it is not quite as good. If soil is heavy, dig out to a depth of 1 ft. and fill with 1 part top soil, 3 parts coarse sand and the peat. Plant tubers as soon as weather is quite warm in a horizontal position, 3" or 4" deep and mix a liberal portion of peat with soil close to tubers. *Gloriosas* prefer full sun exposure but will do well in slight shade. They like heat and abundant moisture. Lack of either will slow them down. We recommend only outdoor culture.

Gloriosa rothschildiana deserves the name **Glory Lily**. Very vivid colors, red with yellow markings turning later to deep red, in a true lily form. Flowers are long lasting and are used in corsages. Plant 4 ft. tall. Prices, small blooming size tubers, \$1.00, larger sizes that produce larger plants and more flowers at \$1.50, \$2.50.

OXALIS FAMILY — Oxalidaceae

Because of their masses of bright, colorful flowers, the ease of their culture and the insignificance of their cost, *Oxalis* are favorite with many gardeners. They are so varied in form that they appeal to the collector also. The winter growers are most cheerful pot plants and the summer growers make bright, interesting borders or beds of low plants. Here they will make a solid bed of color, enduring for many weeks.

Oxalis adenophylla, lilac rose. 15c ea. \$1.50 doz.

O. crassipes. Tuberous. Bright rose flowers. Evergreen and everblooming. Tuberous rooted species start slowly. Keep moist. 15c ea. \$1.25 doz.

O. brasiliensis. Bright magenta fls. Starts growing in winter and continues to late spring. Bulbs 35c.

O. hedysaroides rubra. Firefern. A shrubby type bearing large yellow flowers. This is a most colorful plant in that the large leaves are satiny wine-red in color, and attracts instant attention. It is also sensitive to touch much like a sensitive plant, but instead of leaves closing up, these open out wide. It is a must for any collection of house plants. \$1.50.

O. lasiandra. The prettiest summer *Oxalis*. 5 to 10 leaflets. Bright rosy crimson flowers. 2 for 15c. 75c doz.

THE CALLA LILY FAMILY — Araceae

This family contains the so-called Calla Lilies or *Zantedeschia*, Fancy Leaf *Caladium*, *Sauromatum*, *Amorphophallus*, *Arum*, *Drunculus*, *Anthurium*, *Spathiphyllum*, etc. All are shade plants and need acid soil.

Zantedeschias are not true Callas, tho this is their common name. **Culture.** Colored Callas, *Zantedeschia elliotiana* and *Z. rehmanni elegans* may be potted or planted in the garden in almost frostless deep south. If the rest period, when the enzymes of bulbs and tubers are changing the stored starch into sugar, is too short, planting in cold wet soil may cause them to rot. When a bulb, corm or tuber is ready to grow, there will be root knobs on the base and top growth started.

A soil of peat and enough coarse sand to feel very gritty, as described for *Amaryllis* is good for most of the Araceae. Note exception as to *Anthuriums* and *Spathiphyllums*. Fertilize with Spoonit or manure water. In pots, cover only 2" but in the ground in Calif. or the deep south, they may be planted about 3" deep. They need about half shade. Keep barely moist until growth is well started, then water freely. Cool temperatures suit them best. Hardy outdoors in S. Calif.

Z. rehmanni elegans. Improved light pink form. 45c each. 3/\$1.25.

Z. elliotiana. Deep golden yellow. If not given enough sun they become tall and spindling and fail to flower. 35c ea. 3 for \$1.00.

Amorphophallus revieri. Sacred Lily of India. Culture like *Zantedeschia*. The tubers may be stored dry and allowed to flower before potting or planting. We have blooming size tubers for \$5.00 ea. Smaller tubers for \$2.50 and \$3.50. Sm. \$1.00 ea.

Sauromatum venosum. Lizard Lily. The long, serpent like spathe wriggles along on soil surface. I've seen persons jump, at their first look. Soil and culture similar to *Zantedeschia*. Large tubers, \$1.50 and \$2.00. Medium, \$1.00.

S. nubicum. Rare, collectors species. \$3.50.

Anthurium are everblooming if given correct conditions at all times, but sometimes take a vacation when very hot, very cold or very dry.

A. scherzerianum. This species is easy to grow as a house plant as it is less demanding about temperature, etc. Mature, old plants may become 15" to 18" tall, but they start blooming at only 4" or 5" tall. Colors range from red, spotted red and white, to white. Blooming size, assorted colors only. We are offering small plants this year for \$1.50.

A. sandens. A trailing plant with foliage resembling the common Rubber Plant but smaller, with aerial roots emerging from each node. Flowers are very small, green and insignificant, but the cluster of seed berries that follow are like pearls and hang on for a long time. They are white or lavender and are very decorative. This plant may be used as a hanging plant or trained on a totem pole. An ornamental plant. Small \$1.00.

Fancy Leaf *Caladiums* are the most gorgeous of foliage plants. Every leaf is a flower as vivid in color as a rose. We have selected for you 12 of the most beautiful, we think, this year. **Culture.** The *Caladium* is a tropical plant and naturally grows best in very warm temperatures, 70 degrees or more. They are heavy feeders and seem to grow best in a soil with a pH of 5.5 to 6 and with sufficient organic matter to prevent its packing and sealing to the point of locking out air circulation. The pot soil should be loose and fluffy even after continuous and frequent watering during the growing period. A mixture of equal parts of coarse sand, peat or leaf mold, and dairy manure has been found satisfactory. *Caladiums* should be started in moist soil, or peat. After roots have started more water should be used. As the plant develops and the leaf area increases, more water is thrown off by the leaves and more water will be required, but the soil should never contain sufficient water to "water-log." Constant watering will tend to leach the plant food from pot soil so it will be desirable to feed the plants periodically. Use Spoonit for a good fertilizer.

The popularity of these spectacular foliage plants has grown in recent years. They provide breath taking beauty in the garden or indoors for several months.

Ann Greer. A large round leaved red. Medium leaf producer. Low growing.

Bing Crosby. New. Large white heavy textured leaf, red veins with forest green border. A strong grower.

Candidum. Standard white, very popular, snow white, green veins and network, good in any situation.

Fire Chief. New. Brilliant deep rose center, light green border with rose splashes, black stems. Very good.

Grey Ghost. Medium sized leaves of ivory white mottled and splotted all over apple blossom pink. Very beautiful.

June Bride. The whitest of the whites. It is low growing.

Lady in Pink. New. Beautiful dark melon pink leaf with slightly darker pink veins and midriff, Christmas green narrow border. Low bushy plant, slightly transparent.

Miss Marveen. White suffused with delicate pink and occasional rose pink splotches. Very low growing and good leafer.

Mrs. F. M. Joyner. A very colorful new white. Red veins and border, vigorous.

Pink Blush. New. Slightly waxed frosted pink leaf, moss green veins and dbl. line border with netted green lines throughout, slightly transparent. Low bushy plant, gorgeous.

Sorocoba. Has a suffusion of delicate pink over white. A good leafer.

White Queen. New. White to grey background, vivid lipstick red veins, netted with green lines throughout and double green line border with white between. A splendid pot plant.

Prices. 50c ea. or complete set of 12 for \$5.40. These are No. 1 bulbs labelled.

Caladium Lance Leaf varieties. These are new varieties with narrow pointed leaves. Very beautiful.

Cinderella. A white lance leaf with occasional green mottles and vermilion splotches. Interlaced with minute pink dots, lots of leaves. Very beautiful.

Little Rascal. Low growing heavy textured leaf. Very rich wine red color. Beautiful beyond description.

Pink Glow. Fine red veins, melon pink leaf with narrow green border and some lighter pink specks. Slightly heart shaped lance lf. 50c each. One each 15 varieties, value \$7.50 for \$6.75.

THE GESNERIA FAMILY — Gesneriaceae

The Gesneriads listed here are tropical or semi-tropical. They are strictly house plants outside of the tropics. Most of them are for the warm house. All are either tuberous rooted and deciduous or fibrous rooted and evergreen.

Culture. The soil may be one part by volume of sharp, coarse sand and 2 parts peat or peat and leaf mould. Add 1 tablespoon bone meal for a 6" pot. Mix thoroly. Set tuber a little under soil surface concave side up and mulch with $\frac{1}{2}$ " wet sphagnum. Last of all water until a little runs thru at bottom. These are tropical plants. The best starting temperature is at least 80°. They will start, but a little more slowly at 70°, with 60° or over at night. Keep soil moist and they can be in full sun until foliage appears, then slightly shaded. The plants need good light and more sun than most Gesneriaceae. Leggy plants result from insufficient light. The secret of producing good Gloxinia is in frequent feedings. We use Spoonit.

Gloxinias. Improved California grown. 1½—2" tubers, in the following sorts: **Brown's Red**, fine flexible leaved variety; **Crimson Rose**; **Emperor Frederick**, scarlot with white throat; **Etoile de Feu**, scarlet; **Prince Albert**, dark violet; **Princess Elizabeth**, blue with white throat; **Roi des Roges**, dark crimson; **Tigrina Pink**; **Tigrina Wine**; **Violacea**, soft violet. 50c each. One each of the ten listed \$4.65. \$5.00 doz.

Gloxinias mixed. These are assorted sizes, some are very large others small but all good flowering sizes. 30c each. 6 for \$1.75. 12 for \$3.00.

Gloxinia Seed. We have a very good mixture of seed, 50c packet, 3 for \$1.25. Please send stamped addressed envelope for seed.

Seed Culture. Place fine grained vermiculite or terralite in the bottom of a plastic refrigerator dish 3" to 4" deep and moisten well. Plant seed very thinly over surface. Keep covered with lid until plants are ready to pick out. One must make sure that moisture does not escape and add water if it does. They may be picked out and transplanted into 2" pots after second pair of leaves develop. We also plant seed in 9" pans, half filled with peat and milled sphagnum. When planted cover pot with glass. We grow many rare seeds by either method, including African Violets. Gloxinias flower at about 5 months.

Episcias resemble African Violets in form and in other ways, yet are entirely distinct. African violets flower profusely. Episcias are very showy foliage plants but have brilliant, usually red, flowers, not so freely produced. They are natives of the American tropics, not African. Their flowers are solitary or clustered, not in cymes as in African Violets. The resemblance is casual, not botanical. But their red flowers and general contour of the plants have resulted in promotion of *E. fulgida* (often sold as *E. coccinea*) as a Red Violet. They are very tender tropics and should not be colder than 60°. At about 50° they are badly damaged or killed, hence cannot be shipped when likely to encounter temperatures under 50°. They make stolens or runners like a strawberry and new plants are made in a similar manner. Or stolens may be allowed to hang as jewelled pendants. Flowers are usually bright scarlet and foliage usually villous, or hairy and velvetlike. They may also be grown in pots, same soil as African Violets. Either way they require constant moisture.

E. Acajou. Dark bronze with wide silvery green midrib. \$1.00.

E. Chocolate Soldier. Dark chocolate with narrow silver midrib. \$1.00.

E. Emerald Queen. Dark green with silvery green midrib. \$1.00.

E. Frosty. Prevailing color is the frosty green, spreading to leaf margins from the center and toward the margins are markings of dark green. \$1.00.

E. Harlequin. Very shiny leaves, wide green zone along midrib with very dark greenish bronze between pinnæ from the midrib. \$1.00.

E. dianthiflora. This is a vigorous grower with small green leaves and white flowers with fringed petals in spring and summer. \$1.00. One each of the above for \$10.00.

E. metallica ("Kitty"). Leaves densely covered by short hairs, or villous. Very dark bronze with silvery pink center stripe in midrib. Reverse side, vinaceous purple. \$1.00.

E. Splendens. (Variegata). Silver green markings on emerald green background. This is the last of cupreata cultivars. \$1.00.

E. fulgida. (Coccinea, Red Flame Violet). Medium bronze with silvery green veins. Lovely red flowers—but not a "violet." \$1.00.

Special. One each of the above Episcias \$7.75.

Columnneas. Are epiphytic climbing vines, having large, vivid red flowers. They may be grown in pots, soil similar to that of other Gesneriads.

Columnnea gloriosa. The most profuse bloomer. **C. Schiedeana**, very large, thick stems. **C. microphylla**. **C. Banksii**, **C. Allenii**. **Araguda**. New low price. \$1.00 each. All six \$5.65.

Aeschynanthus (Trichosporum). This is a nice trailing, almost woody vine. In nature, they are epiphytal and climb trees. The plants are attractive and the freely produced large flowers are tubular and vividly colored. Tender tropics. They require constant moisture. Leaves and flowers drop when dry. **Aeschynanthus lobbiana**. \$1.25.

Achimenes have been popular plants for a very long time. They are not too hard for the average amateur. The plants and the flowers are diverse in size and form and one should plant a number of varieties.

Culture: From 1 to 5 tubers may be grown in a 5" pot. We grow them entirely in wire baskets and this seems to us to be the perfect way. We use 16" baskets but for amateurs we recommend 10" baskets rather than larger or smaller. For only 2 or 3 it is all right to use pots or 8" baskets. Some commercial growers use gallon tin cans.

The compost in pots may be the same as for Gloxinias and other Gesneriads. In baskets we line them first with sphagnum and fill center with fibrous peat. It would probably be better to use equal parts of peat and coarse leaf mould. Some sand can be added.

The name is said to mean that they do not like the cold. This may be fanciful but is nevertheless true. They like warm days and nights. A good temperature will not be under 60° at night and up to 80° daytimes, and higher does not hurt them. Protect them from winds or even strong drafts. It dries them out too much and the compost should never become dry. They need about the same sun exposure as Gloxinias.

Achimenes. Assorted. 15 for \$1.00.

Smithiantha (Naegelia) are fine, tuberous rooted, foliage plants. The rounded cordate leaves are covered by soft hairs that give a velvety appearance and cause them to change colors when viewed at a different angle. The showy flowers are long, tubular and in pink and orange shades. Minimum temperature 60° for best growth. We grow in pots in soil as advised for Gloxinias. They should not be too deeply shaded nor ever become dry. We offer dormant tubers delivered about early summer usually. The dormant period is somewhat variable. They must be planted at once when received.

Smithiantha cinnabarina. Gorgeous dark red velvety leaves, cinnabar red flowers.
S. Orange Delight. Foliage mottled red brown. Flowers orange outside, yellow spotted orange inside. 75c each. **Smithiantha Yellow Hybrid.** \$1.25.

AFRICAN VIOLETS — Saintpaulias

We have a number of new varieties to offer this spring both in plants and leaves. Some are in small quantity, so please give us a few substitutes or tell us we may substitute. We always send something just as good or better.

Sales Tax. Californians must include 4% Sales Tax. Out of state customers sending plants as presents to a California friend must also pay it. Please read "Terms and Instructions for Ordering," and comply on all points.

Cultural directions will be sent with orders or you may send 10c for copy.

Please add 50c toward postage and packing. If wanted by Air Mail or Special Delivery you must pay for this. Estimate cost and promise you will send the difference if not enough.

For prices on plant stands, pots and other supplies for growing African Violets please see "Garden Supplies."

Amanda. Bright double ember pink. Very large, on dark green foliage. \$1.25.

Arctic Nite. Beautiful vivid dark blue double. \$1.25.

Angel Child. White with pink, upper petals green, double. \$1.25.

Blooming Fool. Very heavy flowering medium blue double. \$1.25.

Blue Pom. Very large double blue with supreme foliage. \$1.00.

Blushing Beauty. Lovely white single with pink edge. Wavy lvs. \$1.50.

Candy Lace. Lovely white with pink, edged with green single. Ruffled lvs. \$1.50.

Cathy Reed. Fringed pink single. Dark wavy leaves. \$1.00.

Cerama. Much admired. Deep rose center. \$1.25.

Charm Song. Charming light blue double. Tailored foliage. \$1.25.

Chocolate Brownie. Dark wavy lvs. Tu-toned pink double with chocolated tips. \$1.50.

Constance Hansen. Medium blue frilly double. \$1.00.

Dapper Dandy. Dark quilted leaves. Medium blue double. \$1.00.

Debbie Moon. (Our new introduction).

Dona Felisa. Single white with deep pink frilly margin. Wavy light green lvs. \$1.50.

Double Peach Blossom. Dark quilted lvs. Peach blossom double. \$1.25.

Double Pink Waverly. Ruffled leaves. Fringed double dark pink. \$1.50.

Edena Rose. A rose pink double with notched girl type foliage, red underneath. \$1.25.

Ember Dream. Bright raspberry red semi dbl. on dark quilted leaves. \$1.00.

Encore. Large full double bright pink fls. dark green leaves. \$1.00.

Fair Elaine. Single white with green edge. \$1.25.

Fancy Free. Warm peachy pink full cactus type double in profusion. \$1.50. \$1.00.

Feathertop. Heavily frilled pink dbl. Deep bronzy green frilly foliage with red reverse side. \$1.25.

Festival Queen. Dark green ruffled lvs. and clusters of double red lav. fls. \$1.25.

Finesse. New. One of finest Peach pinks. Huge full doublefrilled fls. \$1.50.

Fire Dance. Red single. \$1.00.

Fringed Apple Blossom. Wavy leaves. Fringed light pink semi double. \$1.25.

Good News. Deep pink double \$1.25.

Green Dawn. Frilled leaves. Frilled dark pink double, green edge. \$1.50.

Green Beads. Wavy leaves. Double pink, chartreuse fringed edge. \$1.50.

Iroquois. Fine flowering rose pink double. \$1.00.

Jeweltone. Large delicate lilac white full dbl. frilly fls. on dark girl foliage. \$1.50.

Jubilee. Large round leaves. Tu-tone light pink double. \$1.50.

Judith Ann. New. Medium blue, dark center. Dark wavy lvs. Our introduction. \$1.50.

Legionnaire. Giant dark blue, white edge. Profuse bloomer. \$1.50. Sm. \$1.00.

Little Jewel. Dark frilled double pink, ruffled fls. Dark wavy leaves. \$1.50.

McGenty. Medium blue double. Girl foliage. Makes a very nice plant. \$1.25.

Olivia. Wavy leaves. Fringed single pink. \$1.50.

Pink Camellia. Light pink double. Dark supreme leaves. \$1.50. Sm. \$1.00.

Pink Crown. Formal double pink. Plain leaves. \$1.25.

Pink Fire. Double. Makes a beautiful plant. Ruffled leaves. Deep pink. \$1.50.

Pink Monarch. Nice girl foliage. One of largest single. \$1.25.

Pink Petticoats. Fringed deep pink single. Dark bronzy leaves, red back. \$1.25.

Pink Vixen. Deep ruffled single. Girl foliage. \$1.25.

Pride of Rochester. Lovely light pink double, nice foliage. \$1.50.

Purple Gown. Our introduction. Good flowering and growing var. single. \$1.25.

Purple Honey. Dark wavy leaves. Double purple, green frilled edge. \$1.50.

Priscilla Landaker. Beautiful ruffled semi double white fls. Girl foliage. \$1.50.

Raspberry Pink. Very large double pink. \$1.25.

Red Heart. Red tipped, red in heart mottled white and red. Star. \$1.50.

Rose Pink Fimbriata. Very deep single. \$1.00.

Snow Ball. Free flowering double white with quilted leaves. \$1.00.

Snow Drop. Very nice double white. \$1.50.

So. Sweet. A beautiful double pink, much darker center. \$1.25.

Sparkling Waters. Dark blue with dark stripes in flower. Single \$1.00.

Spotlight. Very large pink with very dark center. Fls. rather long. \$1.25.

Tea Time. Wavy leaves. Frilled single white, pink edge. \$1.50.

T V Whispers. Wavy lvs. Double white with blue shadings. \$1.00.

Wedgewood. Luscious light blue double. Excellent black-green foliage. \$1.50.

Winged Beauty. Deep lilac frilled cup blooms with wavy white edge, on dark green girl foliage. \$1.50.

Wintry Rose. Double wine and orchid with wide white edge. \$1.00.

Yolanda. Large double pink, with flexible plain foliage. Heavy flowering. \$1.25.

Plant will be sent in 2¼" plastic pots when possible. We will send an EXTRA plant on \$10.00 order or two extra on \$20.00. You may have choice of color, double or single. We have many new varieties in too small number to list in this catalog.

Violet Leaf List of new and old varieties not listed here is ready, send large stamped addressed envelope or you may send 10c in stamps or coin. 500 varieties.

Leaves, 50c ea. \$5.00 per doz. If you want them by air mail please send \$1.00 for postage and packing. If special delivery add 45c. Please give a few substitutes, if you do not, we will substitute with as good or better varieties if necessary. Dbl means double, b blue, p pink, w white. Many new varieties in this list.

Alabaster, dbl w
Aletha Martin, dbl
Angel Child
Angel Fringe

April Love, dbl l b
April Mist
Berkeley Belle
Bernice Supreme, dbl b

Black Cherry Sup., dbl r
Blaze
Blue and Green
Blue Rose

Blooming Fool, dbl b
 Blushing, dbl
 Blushing Beauty
 Buttermilk Sky
 Blue Peak Sup., dbl
 Bud's Yum Yum
 Candy Lace
 Cerama
 Chari Belle
 Charm Song, dbl l b
 Chocolate Brownie
 Clear Skies, l b
 Coon Valley, dbl d b
 Dapper Dandy, dbl b
 D'Amour, r
 Diane
 Dbl. Clarissa Harris
 Dbl. Holly, l b
 Dbl. Peach Blossom
 Dbl. Pink Fire
 Dbl. Pink Waverly
 Dbl. Rose Wing
 Dbl. Ruffled Queen
 Dbl. Violet Supreme
 Dona Felisa
 Edena Rose, dbl
 Fair Elaine, w
 Feathertop, dbl p
 Fifi, dbl p
 Finesse, dbl p
 Florabella, p
 Frathel's Dbl. Holly
 Frilly Blue Cluster
 Fremont Joy, dbl p
 Fringed Haze
 Fuchsia Bride, dbl

Gay 90's
 Geneva Nueva
 Gibson Girl, b
 Great Lakes, dbl b
 Green Beads, dbl p
 Green Dawn, dbl p
 Green Froth, w
 Headliner, p
 Highland Lassie, l
 Ivory Tower
 Jeweltone, dbl
 Jo Jo
 Jubilee, dbl p
 Kathy Jean
 Lemon Dip
 Lemon Drop
 Linda Marie
 Little Jewel, dbl p
 Livin' Doll, p
 Lucky Streak
 Marilyn K., dbl b
 Maumee Vesper, b
 McGenty, dbl b
 Mint Champagne
 Mint Popcorn, dbl
 Mistletoe, dbl w
 Mr. Lincoln, b
 Northern Autumn, dbl
 Pandora
 Peach Bud
 Pink Camellia, dbl p
 Pink Constellation, dbl
 Pink Dogwood
 Pink Drift
 Pink Fire, dbl
 Pink Geneva

Pink Jade
 Pink Monarch
 Pink Phantom
 Play Boy Sup., p
 Portrait
 Princess Joan
 Priscilla Landaker, dbl w
 Purple Honey, dbl
 Racy Red
 Raspberry Sherbet
 Redderness, dbl
 Renegade
 Rose Sparkler
 Sierra Snow Flake, dbl w
 Snow Ball, dbl
 Snow Drop, dbl
 Snowy Princess
 Spanish Senorita, dbl
 Sparkling Waters, b
 Spotlight, p
 Spun Sugar
 Star Holly
 Starmaker
 Susan
 Tea Time
 The Mikado
 Tip Top
 Thunderhead, w
 TV Vallen Pink
 Wedgewood, dbl b
 White Pride Sup., dbl
 Winged Beauty
 Winter Mist
 Wintry Rose, dbl r
 Witch Craft
 Yolander, dbl p

African Violet Leaves 35c ea. 3 for \$1.00. \$3.00/doz. Any over 12, 25c ea. 25/\$5.00. We give extras depending on size of order. We will be glad to make selections for you if you will give us price range, color, single or double.

Alaskan Waters, dbl b
 Angel Flake, dbl w
 Angel Lace
 Autumn Moon, dbl b
 Beau Kay, dbl r
 Blue Crepe, dbl b
 Blue Duet, b
 Blue Pom, dbl b
 Cathy Reed, p
 Centennial Sweetheart, p
 Cherry Ice
 China Doll
 Clarissa Harris, p
 Constanica
 Corrine, dbl w
 Cup of Claret, r

Dorothy Gray, dbl p
 Dixie Moonbeam
 Dolly's Dream, dbl b
 Double Inspiration Sup.
 Dbl. Midnight
 Dbl. Red Comet
 Dbl. Uncle Bob, p
 Dbl. Snow Frills
 Ebb Tide
 Ember Pink Sup.
 Fancy Free, dbl p
 Fire Dance, r
 Fringed Pom Pom
 Grotei Red Girl
 Good News, dbl p
 Her Grace

High Noon, r
 Holly Halo
 Hollywood Ace, dbl b
 Hugonaut, dbl
 Improved Boyce Edens
 Iroquois, dbl p
 Kimberly
 Legionnaire
 Lilac Dale
 Lingo
 Little Giant Blue, dbl
 Little Giant Purple, dbl
 Love Knot, dbl p
 Love Song, b
 Mark Roberts
 Masquerade

Matchmate
May Melody, dbl b
Melody Air, dbl p
Miss Monroe, r
Mr. Chicago, dbl b
New Dawn, r
Peach Chiffon, dbl
Pink Grotei
Pink Petticoats
Pink Puff
Pink Vixen
Prestige
Pride of Rochester, dbl p

Red Glow
Rose Wing
Santa Maria, b
Sea Foam, dbl
Senora Ramona
Shag, dbl
Show Cloud, dbl
Show Day
Show Stopper
Silver Field, dbl
Skywayman
So. Sweet, dbl p
Spic, dbl b

Star Gazer
Star Blue
Sunbonnet Sue
Torchy
TV Beaumont Beauty
TV Cut Velvet
TV Play Boy
TV Scandal
TV Whispers
Valor Blue
Velvet Queen
White Goddess
Whiff, r

BEGONIA FAMILY—Begoniaceae

How to Grow Tuberous Begonias. No plant or flower is more beautiful than that of a well grown Tuberous Begonia. They may be grown in pots or in the garden in most states. They are semi-tropical but do not do well in the tropics.

In Calif., south of San Francisco, they do best near the coast but we grow fine plants and flowers in this hot, dry inland valley by cooling them off by daily sprinkling plants. Our flowers tho are smaller than those grown in cooler areas. Water hurts neither foliage nor flowers. The best place is in a lath house, north of a building or under trees here.

Worth Brown, in his book on Tuberous Begonias (which you should have; see our listing under "Books") recommends them also for pot culture in the house or green-houses. The tubers we sell should have 7" pots.

A loose sandy soil containing much well rotted leaf mould is best. For pots, one may use $\frac{3}{4}$ leaf mould and $\frac{1}{4}$ rich, very sandy loam. If not very sandy add enough sand to the mixture to make it quite gritty. Most commercial growers add a very small portion of dry, powdered steer or sheep manure or well rotted stable manure. It should not be close to the tuber. Do not venture to be liberal. It is probably safer to use liquid fertilizer like Spoonit when plants are well advanced in growth. It is safe to add a tablespoonful of bone meal to each pot.

Do not pot or plant tubers until a sprout appears. A famous grower advises they be spread out in a warm, dark room, the eye up, for sprouting and that moist sphagnum is unnecessary. For potting directions see general culture. Pot or plant sprouted tuber, covering entire tuber. Begonias are shade plants but to bloom well they should have all the sun they can stand without burning.

Begonias like moisture but do not overwater starting tubers or small plants. It is a good plan to dust tubers with sulphur to prevent mildew. If it starts, use sulphur.

If you want fine large flowers, pinch off all but one sprout on tuber—except on the Lloydii. Dropping of buds may be caused by mildew, overwatering, lack of fresh air circulation, too dense shade or too hot.

We list $1\frac{1}{4}$ "- $1\frac{1}{2}$ " tubers, a medium size. The size of tubers does not govern size of flowers. Even small tubers produce full sized flowers, but smaller plants. Culture does affect size of flowers and plants. For the best reference book on Tuberous Begonias get Worth Brown's book listed in this catalog.

Prices. Please note that the dozen rate applies only when 6 or more tubers of one kind or assorted are packed in one bag. If separately labelled, 12 tubers take the single rate as is our rate on all bulbs.

Giant Ruffled Doubles. Improved Camellia type. Ten colors: Apricot, Blush, Pink, Salmon, Scarlet, Red, Orange, Rose, Yellow, White. Price 30c ea., 6 of one kind or assorted, \$1.50. The ten var., in one bag for \$2.60.

Giant Double Picotee. White with pink edge, White with red edge, Salmon with scarlet edge, Rose, Red and Apricot. 35c ea. All six for \$1.75.

Giant Single Crispa or Filled. Very large, profusely frilled and ruffled, single flowers. Pink, Yellow, Scarlet, Rose and Apricot. 30c ea. 5 colors \$1.30.

Double Hanging Basket, or Lloyd. There are many blossoms per tuber. An improved large-flowering strain. Red, Salmon, Apricot, Rose, Yellow, White, Pink, Orange and Scarlet. 35c ea. 9 colors \$2.60.

Rose Form. Double. Another improvement on the old Camellia type. The petals are smooth and long, and with a very distinct center. Red, Yellow, White, Pink, Rose. 35c ea. One each color \$1.50. 12 for \$3.00.

Multiflora Gigantea. This new strain produces large numbers of medium size blooms of good form. Excellent for bedding. Two colors, Red and Yellow. 30c ea. 6 for \$1.55. 12 for \$3.00.

Marginata. A crispa type flower with margin in a different color. Red and yellow. 35c each. 6 of either color or mixed \$1.50.

Red Triumph. A ruffled double type of ruby-red with a velvety texture. Large tubers. \$1.00 ea. 3 for \$2.85. 12 for \$10.00.

Collection. \$12.05, special, all 40 colors and varieties, \$10.85.

THE ORCHID FAMILY — Orchidaceae

The ideal place for an amateur to grow orchids is in a hobby greenhouse.

Our recently revised 12 page booklet *How to Grow Orchids* is now 50c per copy, postpaid. Add 2c sales tax in California.

Culture of Cattleyas. By far the most desirable of orchids. Many amateurs are having success in growing and flowering this most beautiful flower. Briefly you must have a greenhouse, a room or a glassed in porch where the plants will have good, strong light but no direct sun, unless a little in very early A.M. or late P.M. Greenhouse glass must be shaded by a coat of white wash or shading compound. In the home, shading may be had by using muslin curtains. If the foliage becomes very light green or yellowish the light is too strong; if a deep rich green, the shade is too much. 65° to 80° is close to the best temperature range. Note the temperature, light exposure and humidity favorable to African Violets. The same is about right for Cattleyas. You can grow them side by side. But watering is different.

We spray the foliage of Cattleyas at least once a day in summer and if hot often twice. This cools them. Do this about noon, earlier if temperature becomes too high. Do not spray in late P.M. as foliage should become dry before night. When cool weather arrives we spray less often, much less often in winter. Once or twice a week may be enough or even too much if you do not properly heat for their comfort. A little water held around the base of a bud spathe may cause it to blacken and rot off. Over watering Cattleyas is the most common error. We do not usually pot water oftener than once a week and often spraying is enough if some falls on the osmunda. You must study your plants and note their reactions. Success will reward you.

Cattleyas. We offer blooming size plants for \$5.00. These are in 4" or 5" pots. Assorted species and hybrids.

C. Genevieve Toy. (C. Cordary x C. Ardentissima.) Flowers very dark and beautiful. Spring. 5" \$15.00.

C. Remy Chollot. Medium lavender color. \$10.00.

C. Enid. Very large, rose purple flowers in winter and some flowers can be cut throughout the year. \$10.00.

C. Mt. Royal. \$7.50.

We have Cattleyas in too small lots to list and some with lost labels that we can let you have for \$5.00 each.

If wanted in pots they must go by express collect, out of pots with enough potting material, by Parcel Post.

Brassavola culture. They may be grown in any media used for growing orchids. They may be grown in lath house or under trees in Southern California.

Brassavola glauca. Large white flower, slightly fragrant, often tinted with green, lip white sparsely marked with pink and purple or entirely white. In 8" basket, \$10.00 by express. Loose, with material to pot, by Parcel Post.

Brassavola Digbyana. Plant resembles a Laelia. The white flowers have a fringed lip. We grow in baskets. Price \$10.00, in 8" wire basket, f.o.b. express. Out of basket with enough potting material, by Parcel Post.

Oncidium cebolleta. Rush-like leaves of bronzy color, 8 inches long crowded together. The flower stem is well branched and carries dozens of small yellow and brown flowers. \$5.00 ea.

Cypripediums may be grown in "cool house." We grow them in our orchid house which also has Cattleyas and other plants. They will grow and flower in your window garden.

Cypripedium callosum. In shape, similar to our native Lady Slippers and closely related. Correct botanical name is Paphiopedilum but usually known as above. Flowers are fine for corsages, 3½"-4" wide, white variously marked with green and purple veins and a brown purple lip. Blooms about Jan. to April, sometimes later. **C. insigne.** \$5.00 each. We will ship by parcel post out of pot or if wanted in pot will be sent by Express Collect.

Epidendrum o'brienanum. This orchid has a large terminal cluster of brilliant red flowers, each in the typical orchid form. The flowers open 10 or more at once and are about 1¼" wide. The plant makes a large cluster of tall stems, 3 ft. or more. Under good culture they flower all the time. They will grow well in full sun exposure; and abundance of water in summer. They grow easily in the garden in the south. In the north they are easy in pots or baskets. Small rooted plants 75c ea.

Osmundine, best Florida grade, \$2.00 lb. postpaid.

MISCELLANEOUS

Tecolote Ranunculus. Giant Double Camellia type blooms and huge brilliant Ruffled Doubles. 50c doz. \$3.75/100. **Anemone St. Brigid.** Large double and semi-double flowers. Mixture of brilliant hues and delicate shades of scarlet, rose, pink, lavender and blue. 60c doz. \$5.00/100. **Anemone Monarch de Caen.** Magnificent strain of single Poppy Anemone with immense flowers. Mixture 50c doz. 100/\$4.00.

Culture. Hardy only in deep south. It is best to start after summer heat has gone—in mild autumn weather. Don't forget to keep them moist. Transplant to garden in deep south or to pots in north. You can start them or grow them in a cool room in the house in winter. They should have sandy soil with peat added. Heat is their enemy.

Aphelandra Louisi. A new plant for the window garden or greenhouse. Deep green with white veins. Flowers are yellow. New and very popular. Small plants \$1.00 each.

Ceropegia Woodi. Hearts on a String. Sweetheart vine. Rosary vine. Heart shaped leaves. The most desirable species. 50c.

C. debilis. Cylindrical leaves. Rapid grower. 35c.

C. Barkleyi. The oblong leaves are pointed at the apex. 60c.

Cacti and Succulents. 10 assorted Cacti or Succulents, \$2.00. 20, all different, \$3.25.

Heliconia species. Heliconias are sometimes grown in the greenhouse, or out-of-doors in warm regions for the foliage effects, making large clumps if given room. The plants thrive well in rich loam with plenty of water. They have large banana-like leaves. \$2.00.

Philodendron selloum. A popular Brazilian species. Cold-resistant, can stand slightly below freezing. Large, notched leaves. Sm. \$1.00. Larger plants \$2.50.

Gingers. Culture. Plant in rich soil, provide light shade and plenty of water. They should never dry out while growing. They refuse to flower if kept too shaded. The flowers are produced in terminal heads and are very fragrant. Delivery anytime.

Alpinia nutans. Shell ginger. Very tall growing evergreen ginger lily. The attractive flowers are produced at the top of the leafy stems. Flower spikes hang downward like a cluster of grapes. In bud it is white tipped pink. Open flowers exhibit orange and red inside. \$1.75.

Hedychium coronarium. Garland-flower. Floral bracts large and firm and closely imbricated, with 4 to 6 white very fragrant flowers. \$1.00.

H. flavum. Yellow Ginger. Much like *Gardnerianum*, tall grower. \$1.00.

H. gardnerianum. (Kahili Lily) Lvs. 1½ ft. long and 6 inches wide; fls. light yellow, with red stamens. Fragrant and a sure bloomer. \$1.00.

Kaempferia. The jewels of the Ginger Family of plants; They have extremely ornamental foliage and fugitive, bright and cheery flowers. Excellent subjects as house or glasshouse plants. Pot in a rich, porous compost in four inch pots and treat like any other deciduous bulbous plant. Water and fertilize well when in active growth, but keep nearly dry when dormant. For best results repot in fresh compost each winter.

Kaempferia galanga. Bright green oval leaves. The flowers are crystal white with purple eyes, and bloom in summer. Very dwarf.

K. gilberti. Oblong leaves with broad white margins, grown for their decorative value in prior years. Flowers purple and white. \$2.00.

K. involucrata. Light green oval leaves prominently ribbed. Lilac flowers in summer. \$1.50.

THE PINEAPPLE FAMILY — Bromeliaceae

Bromeliads include *Billbergia*, *Aregelia*, *Aechmea*, and many other genera.

Billbergias are most unusual and fascinating plants. Not only are the flowers in intriguing pastel shades but the floral display is made brilliant by the large vividly colored bracts that cover the scape. The leaves form a rosette and are more or less rigid. Some have brightly colored leaves and others are often mottled, striped or barred. All are desirable foliage plants.

In the outdoor garden they should have the same soil as recommended for pots. A few, like "nutans," will grow in nearly any soil but will do much better in the type recommended. They do well on the trunks of Palms.

They need about half shade. Too much sun will burn and finally destroy the foliage. Those species and varieties having highly colored foliage do not develop their rich colors when too deeply shaded. Most of our plants are grown in a well shaded *Clivia* house. When well established and growing, richer colors may be brought out by giving a little more sun than we do. Culture of *Aechmea* and *Aregelia* is the same.

Aechmea calyculata. The cones of bright yellow flowers are carried on thin stiff stems 18" high. Tubular rosettes of bright green foliage are about 15" high. \$1.50.

A. mariae-reginae. Robust rosette of broad, gray-green, leathery leaves, recurved and with toothed edge; stout spike with pendant, delicate pink bract-leaves, topped by cylindrical head of red-tipped berries and violet flowers. \$7.50.

A. miniata var. *discolor*. Leaves purple or violet-brown on the back. The red berries last a long time. Very pretty. \$3.50.

A. ortgiesii. A very useful dwarf plant with rosettes of recurved serrated leaves looking more like a *Dyckia* than an *Aechmea*. The deep lavender flowers are carried on a brilliant red cone in the center of the leaves which also become red occasionally while the plant is in bloom. \$5.00.

A. pineliana. Attractive, wide open rosettes of foliage toothed with dark spines, and colored soft shades of rose, copper, gray and green. The stem is covered with red bracts and topped by a small head of yellow flowers. The berries last a long time in color. \$3.00 each.

A. Weibachii. Attractive rosette of oblanceolate coppery-green leaves wine red beneath, and spined; inflorescence on panicle with glowing crimson bracts and orchid-colored ovaries and flowers. \$4.00

Billbergia Burkholtzi. Tall, slender, erect green leaves. Rose bracts, lavender fls. \$2.00.

B. distachia. Long, reddish green lvs., spotted cream. Rose bracts, blue and green fls. 75c.

B. Elvenia Slosson (Nutans x Alberti). Tall plant with very attractive flowers in spring. It takes a lot of postage and its fine quality makes it cost \$3.00 each.

B. nutans. Mid-winter, beautiful inflorescence on small plants. Fine pot plants. 75c.

B. pyramidalis. Wide green lvs. Red fls. tipped violet, red bracts. \$2.00.

B. Rubro-cyanea. Most colorful foliage, red and green spotted cream. Green fls. edged blue. Crimson bracts. \$1.00.

B. speciosa. Green lvs., striped on back. Green fls., tipped blue. Rose bracts. \$2.00.

B. Theodore L. Meade. Green lvs. and large, beautiful inflorescence, continuous all year on new growths. \$1.50.

B. thrysiflora (pyramidalis x amoena). Finest hybrid. Beautiful inflorescence. \$1.50.

B. Zebrina. Lvs. banded white on back. Salmon bracts, green fls. \$1.50.

Cryptbergia Meadi. A bigeneric bromeliad hybrid of *Billbergia* and *Cryptanthus*. Flowers are insignificant, but foliage is lovely, being of pinkish and bronzy tints especially when given plenty of light. Highly recommended for the window garden. \$1.00 ea.

Cryptanthus Bromeloides, var. *Tricolor*. One of the most colorful of the *Cryptanthus*. The leaves are variegated white and green, and in strong light it is stained pink and red, assuming a most charming color effect. The amount of color stain varies in direct proportion with the amount of light. \$2.50.

Neoregelia spectabilis. Called "Fingernail plant" because of the red tips of the metallic olive green leaves; gray crossbands beneath; blue flowers in low cushion. \$3.50.

Big 4 collection. Nutans, Distachia, Rubro-cyanea and Zebrina. Value \$3.50. Price \$3.25. We will send larger plants if you order them to come by express, f.o.b.

Sansevieria Golden Hahni. Just like Hahni in size and form but golden yellow in color with some green variegations. New and scarce. \$4.00 ea.

Tillandsia ionantha. A miniature plant of xerophytic habit. It is strictly an air plant and does not have to be planted except for convenience. In nature it grows on tree bark, rock or telegraph wire. The best method of handling is to plant in a very small pot of osmunda and set in full sunlight. Water the leaves occasionally. The two inch rough leaves are crowded together urn-shaped. When in flower the leaves turn red. The flowers are very large for the size of the plant, tubular in form and purple in color with yellow anthers at the tip. This is one of the finest plants we know of for a small sunny window garden. \$1.00 ea.

Tillandsia lindeni. Gracefully curved pointed leaves with maroon lines deepening towards the base. The flattened ten inch flower spike is light pink with large blue flowers emerging alternately from the sides. Very long lasting. Some consider this the finest of all bromeliads. \$7.50 ea.

Quesnelia arvensis. This is a terrestrial plant and should be grown in the ground or a sandy soil mixture with peat added, if potted. The leaves are large and spiny. The bloom is erect, a brilliant shade of pink in a large closely packed umbel. Should be grown in open sunlight. Rare. \$5.00.

Q. liboniana. Light green foliage that is rather stiff in form. The flowers are stunningly different, being a combination of deep orange and blackish purple. \$1.50 ea.

Vriesia marie. "Painted Feather," hybrid larger than *carinata*, light green foliage tinted pink and showy, flattened, featherlike spike with bracts salmon-rose at base, and yellow dotted brown toward apex; yellow flowers. \$7.00.

V. carinata. A small growing plant with about six-inch spread, plain green shiny leaves. Red, yellow and green colors on a fan-like structure on end of a ten-inch stem. The color lasts a long time. Summer blooming. \$7.50.

V. splendens. Flaming Sword. A beautiful green plant with mahogany stripes. Flower spike tall, flat, and brilliant orange. Spectacular. Rare. Plant does not sucker like other Bromeliads but makes new plant in its own center. Small \$5.00.